

REMARKS

Reconsideration of this application as amended is respectfully requested.

In the Office Action, claims 1-12 are pending and rejected. In this response, claims 7 and 8 have been canceled without prejudice. Claims 1, 10, and 11 have been amended to particularly point out and distinctly claim, in full, clear, concise, and exact terms, the subject matter which Applicant regards as his invention. In addition, no new claims have been added. Thus, claims 1-6, and 9-12 remain pending. No new matter has been added.

REJECTIONS UNDER 35 U.S.C. § 101

Claims 11 and 12 have been rejected under 35 U.S.C. § 101, as being directed to non-statutory subject matter. Applicant respectfully submits that claim 11 has been amended to include “computer readable medium,” instead of “readable medium,” as suggested by the Examiner. Accordingly, Applicant respectfully request that the rejections of claim 11 and 12 under 35 U.S.C. § 101 be withdrawn.

REJECTIONS UNDER 35 U.S.C. § 102

Claims 1-3, 5, 7, and 10-12 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Coleman U.S. 2003/0121007. Applicant respectfully submits that claim 1 is patentable over the cited reference because Coleman does not disclose all of the limitations of the claim. Claim 1, as amended, recites:

An image processing apparatus comprising:
 an image attribute determining unit to determine an image attribute of an image data;
 an object dividing unit to divide the image data into a plurality of objects based on the image attribute; and
 an object describing unit to describe the objects in predetermined formats and convert the objects into a file of a predetermined file format, wherein
 the object describing unit describes an object having a predetermined image

attribute among the objects by linking an additional object representing attribute information on the predetermined image attribute with the object having the predetermined image attribute, wherein the additional object is an invisible object, and wherein a size of the additional object equals that of the object having the predetermined image attribute. (Emphasis added).

Applicant respectfully submits that claim 1 requires an object describing unit that describes an object having a predetermined image attribute by linking an additional object representing attribute information on the predetermined image attribute with the object having the predetermined image attribute. The additional object is an invisible object and a size of the additional object equals that of the object having the predetermined image attribute. Coleman fails to disclose at least these limitations of the claim

Coleman is directed to a printing system for use in printing objects of any of a plurality of different object types that includes a printer and a printer control device. The printer control device, via the user interface, associates printer-independent print-quality characteristics with a selected object type to be printed by the printer. The printer-independent print-quality characteristic is an instruction associated with an element, such as object type, in an electronic page which indicates printer independent features that are preferentially emphasized when printing the element (e.g., “make sharp edges, reduce mottle, distinguish neighboring colors, reduce moiré, etc). Coleman, Abstract.

The Office action purports that the above mentioned limitations are disclosed in Coleman, specifically indicating that the printer-independent print-quality characteristic and object descriptor, as described in paragraph 15 meet these limitations. Applicant respectfully disagrees. As described in paragraph 15, Coleman discloses a method of creating a page description language description of an electronic document that includes providing an electronic document having at least one image object, converting the electronic document into print data and rendering data in accordance with a page description language to generate a PDL file. At

least one printer-independent print-quality characteristics is associated with the at least one image object, and the association information is inserted into the PDL file. Coleman also discloses that the printer-independent print-quality characteristic may be associated according to the image object's type and by object descriptor. Although Coleman discloses associating print-quality characteristics with the image object and inserting the association information in the PDL file, nothing in Coleman discloses that the print-quality characteristics are associated or linked to the image object using an additional object that represents the attribute information. As such, Coleman fails to disclose linking an additional object representing attribute information with the object having the predetermined image attribute, as required by claim 1.

Furthermore, regarding the invisibility of the additional object, the Office action purports that this limitation is disclosed, stating that the object is not intended to be printed and therefore is invisible. Office action, mailed Sept. 17, 2007, page 5. Applicant respectfully disagrees. The claim *requires that the additional object is invisible*, not the print-quality characteristics. As described in Coleman, the printer-independent print-quality characteristic is information that is inserted into the PDL that is later translated into printer dependent imaging actions. Coleman, paragraph 15-16. The printer-independent print-quality characteristic is merely an instruction associated with an image element that indicates printer independent features that are emphasized while printing. Coleman, paragraph 10. As such, Coleman does not disclose linking an invisible object with the image object, as required by claim 1.

Moreover, Coleman does not disclose that the additional, invisible object has a size that is equal to that of the object having the predetermined image attribute. The Office action has not presented any analysis of how Coleman discloses this subject matter (which was originally set forth in claim 8. In addition, there is nothing in Coleman that sets forth such teaching. Accordingly, Coleman fails to disclose that a size of the additional object equals that of the

object having the predetermined image attribute, as required by claim 1.

For the reasons stated above, Coleman fails to disclose all of the limitations of claim 1. Given that the cited reference fails to disclose all of the limitations of the claim, Applicant respectfully submits that claim 1 is patentable over the cited reference. Accordingly, Applicant requests that the rejection of claim 1 under 35 U.S.C. § 102(e) be withdrawn.

Given that claims 2-6 and 9 depend from independent claim 1, which is patentable over the cited reference, Applicant respectfully submits that dependent claims 2-6 and 9 are also patentable over the cited reference. Accordingly, Applicant requests that the rejection of claims 2-3, 5, 7, and 9 under 35 U.S.C. § 102(e) be withdrawn.

Applicant respectfully submits that claims 10 and 11 are patentable over the cited reference for similar reasons described above with respect to claim 1. Given that the cited reference fails to disclose all of the limitations of the claim, Applicant respectfully submits that claims 10 and 11 are patentable over the cited reference. Accordingly, Applicant requests that the rejection of claims 10 and 11 under 35 U.S.C. § 102(e) be withdrawn.

Given that claim 12 depends from independent claim 11, which is patentable over the cited reference, Applicant respectfully submits that dependent claim 12 is also patentable over the cited reference. Accordingly, Applicant requests that the rejection of claim 12 under 35 U.S.C. § 102(e) be withdrawn.

Claims 1, 2, and 7-9 have been rejected under 35 U.S.C. §102(b) as being anticipated by Nicholson U.S. 2002/0067859. Applicant respectfully submits that claim 1 is patentable over the cited reference because Nicholson does not disclose all of the limitations of the claim. Claim 1, as amended, recites:

An image processing apparatus comprising:
an image attribute determining unit to determine an image attribute of an image data;

an object dividing unit to divide the image data into a plurality of objects based on the image attribute; and

an object describing unit to describe the objects in predetermined formats and convert the objects into a file of a predetermined file format, wherein

the object describing unit describes an object having a predetermined image attribute among the objects by linking an additional object representing attribute information on the predetermined image attribute with the object having the predetermined image attribute, wherein the additional object is an invisible object, and wherein a size of the additional object equals that of the object having the predetermined image attribute. (Emphasis added).

Applicant respectfully submits that claim 1 requires an object describing unit that describes an object in predetermined formats and converts the objects into a file or a predetermined file format. Nicholson fails to disclose at least this limitation of the claim.

Nicholson is directed to a system for producing a raster image derived from coded and non-coded portions of a hybrid data structure from an input bitmap. The system includes a data processing apparatus and a recognizer which performs recognition on an input bitmap to detect identifiable objects within the input bitmap. The hybrid data structure includes coded data corresponding to the identifiable objects and non-coded data derived from portions of the input bitmap which do not correspond to the identified objects (non-identifiable objects). Nicholson, Abstract. Nicholson also discloses that the hybrid data structure can be stored in PDF format by storing recognized word labels as coded text (e.g., PostScript) and unrecognized word labels as both non-coded bitmaps and as “invisible” text to enable searching. That is, the unrecognized word objects (i.e., the word label in a list having the highest confidence) can be displayed, but have the same color as the background to appear “invisible” and allow the non-coded bitmap to be displayed over the unrecognized words. The invisible word objects can still be compared to the search word and located by an error-tolerant search mechanism. Nicholson, paragraph 100.

The Office action purports that the above mentioned limitation is disclosed in Nicholson, specifically indicating that the objects must be in some format and are converted to PDF format. Office action, mailed Sept. 17, 2007, page 6. Applicant respectfully disagrees. As described in

paragraph 100, Nicholson discloses that the hybrid data structure can conform with a pre-existing “standard” format for document storage, for example, PDF. Although Nicholson discloses that the data can be in a standard format, such as PDF, nothing in Nicholson discloses that the objects are described in a predetermined format and then converted into a file of a predetermined file format, but rather the hybrid data structure can be stored in this format. As such, Nicholson fails to disclose describing the objects in a predetermined format and converting the objects into a file of a predetermined file format, as required by claim 1.

Moreover, Applicant respectfully submits that claim 1 requires that an object describing unit that describes an object having a predetermined image attribute by linking an additional object representing attribute information on the predetermined image attribute with the object having the predetermined image attribute. The additional object is an invisible object and a size of the additional object equals that of the object having the predetermined image attribute. Nicholson fails to disclose at least these limitations of the claim.

The Office action purports that the above mentioned limitations are disclosed in Nicholson, specifically indicating that unrecognizable word label is the predetermine image attribute and the additional object is the invisible text, as described in paragraph 100 of Nicholson. As described above, Nicholson discloses that the hybrid data structure can be stored in PDF format by storing recognized word labels as coded text (e.g., PostScript) and unrecognized word labels as both non-coded bitmaps and as “invisible” text to enable searching. Although Nicholson discloses that the unrecognized word labels can be stored as both non-coded bitmaps and as invisible text, nothing in Nicholson discloses linking an additional object representing attribute information on the predetermined image attribute with the object having the predetermined image attribute. As set forth in Nicholson, an advantage of the invention of Nicholson is that unrecognized images within a body of recognized images are displayed as

original bitmap portions instead of as misrecognized images or as error images. Nicholson, paragraph 14. These unrecognized images can be assigned word labels for search purposes, such as the word label in a list having the highest confidence, despite being unrecognizable. In particular, the teachings cited by the Office action are in the context of searching the hybrid data structure, illustrated in Figure 11. Nicholson, paragraphs 97-100. In order to enable searching, even if the image has portions that are unidentifiable objects, they are displayed as the original bitmap, but can be assigned a word label to enable searching. The unrecognized word label can be compared to the search word for search purposes. Nicholson, paragraph 100. Although Nicholson discloses that the unrecognized images can be assigned to a hierarchical level and have a word label, nothing in Nicholson discloses that the word label associated with unrecognized image is an additional object, which represents attribute information on the predetermined image attribute, which is linked with the object having the predetermined image attribute, as required by claim 1.

Moreover, the Office action purports that Nicholson discloses that the additional object is an invisible object, citing the same paragraph 100. As described above, the unrecognized images can be assigned a word label. In paragraph 100, Nicholson merely discloses that this assigned word label can be displayed, but have the same color as the background to appear “invisible,” allowing the non-coded bitmap to be displayed over the unrecognized words, nothing in Nicholson discloses that the additional object that represents attribute information on the predetermined image attribute is an invisible object. As such, Nicholson fails to disclose at least this limitation of claim 1.

In addition, Nicholson does not disclose that the additional, invisible object has a size that is equal to that of the object having the predetermined image attribute. The Office action purports that the invisible object is meant to cover the same area as the bitmap object. Office

action, mailed Sept. 17, 2007, page 6. Applicant respectfully disagrees with the Office action's characterization of the cited reference. Paragraph 100 *only* discloses that the non-coded bitmap *to be displayed over* the unrecognized words. Although Nicholson discloses that the non-coded bitmap be displayed over the unrecognized words, the Office action, however, provides no support for Nicholson disclosing that a size of the additional object *equals* that of the object having the predetermined image attribute. Displaying the bitmap over the unrecognized words does not necessarily mean that the bitmap and the unrecognized words are the same size, and Nicholson is silent on this topic. Also, since the unrecognized words already appear invisible since they have the same color as the background, there is no express requirement that the bitmap object cover the invisible object, as asserted by the Office action. Accordingly, Nicholson fails to disclose that a size of the additional object equals that of the object having the predetermined image attribute, as required by claim 1.

For the reasons stated above, Nicholson fails to disclose all of the limitations of claim 1. Given that the cited reference fails to disclose all of the limitations of the claim, Applicant respectfully submits that claim 1 is patentable over the cited reference. Accordingly, Applicant requests that the rejection of claim 1 under 35 U.S.C. § 102(b) be withdrawn.

Given that claims 2-6 and 9 depend from independent claim 1, which is patentable over the cited reference, Applicant respectfully submits that dependent claims 2-6 and 9 are also patentable over the cited reference. Accordingly, Applicant requests that the rejection of claims 2 and 7-9 under 35 U.S.C. § 102(b) be withdrawn.

REJECTIONS UNDER 35 U.S.C. § 103

Claim 4 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Colman in view of Amedei U.S. 6,176,566. Applicant respectfully submits that claim 4 is patentable over

the combination of cited references because the combination of cited references does not disclose all of the limitations of the claim. As described above with respect to claim 1, to which claim 4 depends, Coleman fails to disclose all the limitation of claim 1. Amedei fails to cure the deficiencies of Coleman. Given that the combination of cited references fails to disclose all the limitations of the claims, Applicant respectfully submits that dependent claim 4 is also patentable over the combination of cited references. Accordingly, Applicant requests that the rejection of claim 4 under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION

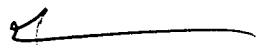
In view of the foregoing, Applicant respectfully submits the present application is now in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call the undersigned attorney at (408) 720-8300.

Please charge Deposit Account No. 02-2666 for any shortage of fees in connection with this response.

Respectfully submitted,

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IN THE DRAWINGS

The attached drawing sheet includes a change to Figure 2. In Figure 2, “dissolving unit 102” has been amended to be “dividing unit 102.” Support for this amendment is found in the specification and does not introduce new matter.

FIG.1

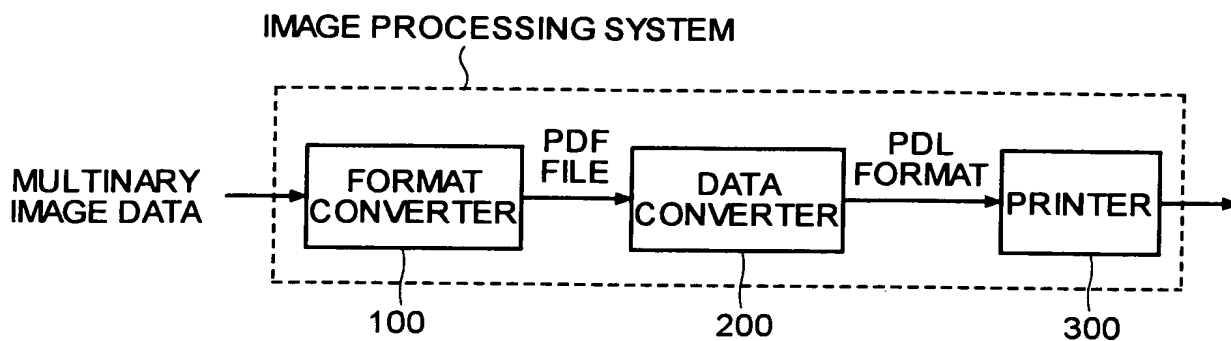


FIG.2

